



Cairo Air Improvement Project
Vehicle Emissions Testing Component

EEAA VET Field Operations
Part 1 On Road Testing-Low Emissions
Tune Up (ORT-LETU)

Chemonics International, Inc.
USAID/Egypt, Office of Environment
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EEAA VET FIELD OPERATIONS PLAN

STAFFING

The EEAA has hired adequate staff to provide for the oversight and operations of the ORT and Phase I LETU programs. These personnel will be in charge of the day to day organization and continuation of efforts initiated by CAIP to provide the first steps toward implementation of a VET program. They will perform field emissions testing and fleet data collection resulting from the investments made to work with the oil companies and Traffic Authorities in testing in-use vehicles throughout greater Cairo.

Attachment 1 contains position descriptions for these personnel. The organization is one of a headquarters based manager (VET ORT Manager), two assistants (one in Field Operations and one in Data Processing) and 27 Field Inspectors. Eventually, these people will form the core of the final VET network program oversight forces. It is imperative that the duties described in Attachment 1 be clearly transmitted and undertaken by the current EEAA employees immediately to begin with a solid foundation for the final program staff. Should EEAA already have position descriptions in place, CAIP would suggest a review of those in light of the information presented here and a concerted effort by EEAA upper management to see that the current staff are fulfilling the tasks assigned to them.

Attachment 2 includes information pertaining to the scheduling of EEAA resources to maintain the field oversight and data collection now being supplemented with CAIP resources. The field oversight schedule demonstrates the realistic manpower requirements to accomplish oversight of the field operations and shows that the new EEAA resources can effectively manage and accomplish this mission. CAIP suggests a formalized schedule with milestones be established and exercised with periodic reviews to judge personnel and network performance.

SUPPORT

Data Processing – One of the critical elements of both the ORT and LETU programs is the collection and analysis of the test results. These data will provide key information to assure a smoother VET program start-up through the ability to set realistic pass/fail criteria based on actual fleet performance. As such, collection, reduction and manipulation of the data and the subsequent reporting of results must be continued by EEAA. Attachment 3 lists the physical resources required to maintain the efforts initiated by CAIP.

The attachment lists the data processing equipment required and the timetable that must be met by EEAA to assure continuity in the program and avoid wasting the monies spent thus far to start both programs. Also included is a description of the type of reports that will result from EEAA's program.

Supplies and Maintenance – In addition to the process of collecting the data being gathered by both the oil companies and the EEAA/Traffic Authority teams, EEAA must assume control of the both the equipment and consumables needed to maintain the field efforts. While the ORT program is wholly within the control of the agency, EEAA must review and act upon their contracts with the oil companies to exercise continued control over the LETU activities now underway.

There are two activities for which EEAA must initiate control:

1. Since CAIP will cover reasonable consumable supplies and routine maintenance for the equipment until the end of the current fiscal year, EEAA must include within the next agency operating budget, adequate funds to maintain the effort beyond June. Attachment 4 delineates the expected supply costs associated with annual operations of the ORT program. The assumptions for the activity levels are included within the attachment. These costs will need to be supplemented with any equipment maintenance costs that will be better defined as operations continue. CAIP will monitor these costs and determine an expected amount as the field experience continues. Note that continued production of forms and other materials may be less expensive than the original production runs so the costs shown are probably higher than needed but are based on the best current information.
2. The oil companies agreed to assume continuing maintenance and supply costs associated with the operation of the analyzers loaned to them by EEAA through CAIP. The terms of these agreements are such that soon, some of the equipment will become the responsibility of the companies. The schedule of the actual placement of the equipment has resulted in this take-over happening over the next few months. Attachment 5 lists these resources and the terms of the current agreements. CAIP will continue to work with the EEAA headquarters staff and the oil companies to assure the smooth transition or relocation of equipment as appropriate.

In both programs, EEAA will want to continue to exercise control over the data collection and review. In this way the agency can insure the quality of and access to the testing data. EEAA should also retain approval rights and in some cases, supply of materials shared with motorists about the emissions testing programs. This is an excellent opportunity for the agency to use these channels to impart its own messages about clean air and the environment to Cairo motorists and the repair industry – both of which are critical elements of the vehicle emissions control solution.

It is important to note that the current EEAA staff will form the core of the long term VET support group within the agency and so should be critically evaluated with this future role in mind. This group will be the foundation for the EEAA staff needed under the initial pilot testing program. When the full VET testing network is put in place, these individuals will then either be redirected or supplemented with appropriate staff to accomplish the program oversight mission required to maintain the private sector participation in both the testing and repair processes. As such, these first field operations and headquarters management and data processing tasks provide an excellent opportunity to the agency to begin to build a cadre of technically qualified and properly trained individuals. These people should eventually be tasked with managing the much larger VET program when it becomes operational.

Attachment 1

VET ORT Job Descriptions

VET ORT Manager

REPORTS TO EEAA VET PROGRAM MANAGER

DUTIES AND RESPONSIBILITIES

- ♦ Manage and coordinate the operation of the on-road testing (ORT) program within budget and in accordance with the policies and procedures of the EEAA.
- ♦ Assume responsibility for any continued operation of the Tune-Up Phase I program providing for vehicle testing within the oil company service outlets.
- ♦ Schedule work assignments to ensure proper staffing for all on-road and traffic authority facility testing and support of the oil company program.
- ♦ Schedule ORT program assistants so that the Manager or an assistant are accessible during all times that public ORT inspections are being conducted.
- ♦ Assist in coordinating visits to and conducting tours of the ORT field efforts or oil company facilities during the period of testing.
- ♦ Hire competent field and HQ personnel and provide for in-depth HQ and on-the-job training to each employee as well as periodic re-training found to be required through routine quality assurance reviews of data gathered by EEAA and the oil companies.
- ♦ Provide for all appropriate employee services granted by EEAA are available to all ORT staff and that they are provided with all personnel benefits, agreements, evaluations, etc. by the agency.
- ♦ Understand general vehicle emissions concepts and the function of selected vehicle emission control devices.
- ♦ Assure the complete review and data reduction of all information gathered as a result of testing (both ORT and oil company testing). Maintain test results database that is current and provide routine reports of findings in a timely fashion.
- ♦ Provide for proper administration and control of data forms, supplies, and parts inventory with the appropriate HQ assistant and equipment supplier. Report weekly and monthly operation activity and extraordinary activity to the EEAA VET Program Manager in a timely manner.
- ♦ Coordinate general equipment maintenance with appropriate program assistant and contracted equipment service company.
- ♦ Assure performance of basic maintenance and repair of inspection equipment, and verify scheduled regular equipment maintenance.
- ♦ Foster positive employee morale and ensure good public relations between employees, traffic authority personnel, oil company representatives, local service station staff and vehicle owners.
- ♦ See that an effective employee safety and training program is implemented and maintained to maximize safe field operations for ORT.

- ♦ Perform other tasks as assigned by EEAA VET Program Manager.

QUALIFICATIONS

- ♦ Bachelor's Degree in Business Management or related field.
- ♦ Supervisory experience is required.
- ♦ Good oral and written communication skills are required.
- ♦ Previous motor vehicle experience desirable.
- ♦ Ability to read and write English sufficiently well to deal with equipment technical manuals and routine reporting requirements to CAIP and US AID is required.

ORT Program Assistant A – Field Operations

REPORTS TO VET ORT MANAGER

DUTIES AND RESPONSIBILITIES:

- ♦ Assist with management of the On-Road testing (ORT) and Tune-Up Phase I programs in accordance with EEAA policies and procedures.
- ♦ Assist the ORT Program Manager in initiating and operating ORT and oil company vehicle testing efforts.
- ♦ As scheduled and directed by the ORT Program Manager, actively supervise all field data collection efforts.
- ♦ Monitor ORT field operations including personnel assignments, productivity, data quality, equipment distribution and maintenance/repair.
- ♦ Provide regular feedback to all field operators regarding the information they submit.
- ♦ Monitor oil company testing program including equipment distribution and maintenance, data collection and review, training and re-training as required.
- ♦ Ensure safety and protection for motorists and employees in the ORT Program.
- ♦ Share accountability for all field inspection operations, including, but not limited to, property, equipment, work schedules (for ORT only), financial matters, etc.
- ♦ Assume responsibilities for the ORT Program Manager in his absence if designated to do so.
- ♦ Assume responsibilities for the ORT Program Assistant B in his absence if designated to do so by the ORT Program manager.
- ♦ Ensure good public relations between employees, the traffic authority personnel, oil company representatives and motorists.
- ♦ Assist ORT Program Manager in preparing equipment, and inspectors for visitors and tours of the field operations during the period of testing.
- ♦ Implement field safety and training program to maximize safe operations, a safe workplace for employees, customer safety, and effectively trained personnel.
- ♦ Perform other tasks as assigned by ORT Program Manager.

QUALIFICATIONS

- ♦ Bachelor's Degree in Engineering or related field.
- ♦ Some supervisory experience preferred.
- ♦ Good communication and customer service skills are required.
- ♦ Possession of a valid driver's license.
- ♦ Able to read and write English sufficiently well to deal with equipment technical manuals and reporting requirements of sponsoring agencies.

ORT Program Assistant B – Data Processing

REPORTS TO VET ORT MANAGER

DUTIES AND RESPONSIBILITIES:

- ♦ Assist with management of the On-Road testing (ORT) and Tune-Up Phase I programs in accordance with EEAA policies and procedures.
- ♦ Assist the ORT Program Manager in initiating and operating ORT and oil company vehicle testing efforts.
- ♦ As directed by the ORT Program Manager, supplement field supervision and data collection efforts of Assistant A.
- ♦ Perform review of all field data collected (ORT and Tune-Up Phase I) and provide complete and timely reduction of all data.
- ♦ Provide routine and special reports from field data using appropriate data processing techniques to yield clear, concise and accurate information for program management and to show findings as required.
- ♦ Through routine review of ORT field data, produce reports and information on productivity, data quality, equipment distribution and maintenance/repair .
- ♦ Monitor oil company testing program through review and reduction of field data and recommend active steps (such as modification to initial training or re-training) to improve or maintain quality standards as required.
- ♦ Routinely perform analyses of all collected data using tools such as statistical quality control techniques to identify individual facilities or personnel whose performance is below expectations.
- ♦ As scheduled and directed by the ORT program Manager, actively supervise the field inspection operations.
- ♦ Assume responsibilities for the ORT Program Manager in his absence if designated to do so.
- ♦ Assume responsibilities for the ORT Program Assistant A in his absence if designated to do so.
- ♦ Perform other tasks as assigned by ORT Program Manager.

QUALIFICATIONS

- ♦ Bachelor's Degree in Statistics, Computer Science, Engineering or related field.
- ♦ Good general computer, communication and customer service skills are required.
- ♦ Experience in database management and some supervisory experience preferred.
- ♦ Possession of a valid driver's license.
- ♦ Able to read and write English sufficiently well to deal with software technical manuals and reporting requirements of sponsoring agencies.

ORT Field Inspector

REPORTS TO ORT PROGRAM ASSISTANT A

DUTIES AND RESPONSIBILITIES:

- ♦ Cooperate with traffic authority personnel assigned to direct vehicles into position for testing.
- ♦ Pre-inspect vehicle for safety and ensure that the engine conditions allows accurate testing.
- ♦ Follow specific test procedures as they apply.
- ♦ Take data from motorist and enter it into the data sheets.
- ♦ Perform the vehicle emissions inspection consistent with policies and procedures.
- ♦ Accurately record test results
- ♦ Provide test results and general program information to motorists.
- ♦ Explain test results as required.
- ♦ Maintain clean appearance consistent with policies and procedures.
- ♦ Perform other tasks as assigned by program management.

QUALIFICATIONS

- ♦ High school graduate or equivalent.
- ♦ Must be able to read and write proficiently in Arabic and have basic English skills required to operate test equipment and record data accurately.
- ♦ Must be able to communicate effectively and politely with the general public.
- ♦ Must be 18 years old.

Attachment 2

ORT Visit Schedule

CAIP/VET

ORT Follow-up Schedule

Draft

ID	Task Name	Duration	03 Apr	10 Apr	17 Apr	24 Apr	01 May	08 May	15 May	22 May	29 May
80	El-Drasa Traffic dept.	38.25 days	PA 1[25%] /04	PA 1[25%] /04	PA 1[20%] /04	PA 1[25%] /04	PA 1[25%] /04	PA 1[25%] /04	PA 1[25%] /04	PA 1[20%] /04	PA 1[20%] /04
108	El-Salam City Traffic Dept.	38.25 days	PA 1[25%] /04	PA 1[25%] /04	PA 1[20%] /04	PA 1[25%] /04	PA 1[25%] /04	PA 1[25%] /04	PA 1[25%] /04	PA 1[20%] /04	PA 1[20%] /04
118	Nasr City Traffic Dept.	38.25 days	PA 1[25%] /04	PA 1[25%] /04	PA 1[20%] /04	PA 1[25%] /04	PA 1[25%] /04	PA 1[25%] /04	PA 1[25%] /04	PA 1[20%] /04	PA 1[20%] /04
119											
1	Ring Road	38.2 days	PA 1[25%] 04/04	PA 1[25%] 11/04	PA 1[25%] 18/04	PA 1[20%] 26/04	PA 1[20%] 02/05	PA 1[20%] 09/05	PA 1[20%] 16/05	PA 1[20%] 23/05	PA 1[20%] 30/05
29	Cairo/ Ismailiya Desert Road	38.2 days	PA 1[25%] 04/04	PA 1[20%] 11/04	PA 1[25%] 18/04	PA 1[20%] 26/04	PA 1[20%] 02/05	PA 1[20%] 09/05	PA 1[20%] 16/05	PA 1[20%] 23/05	PA 1[20%] 30/05
39	Cairo/Suis desert Road	38.2 days	PA 1[25%] 04/04	PA 1[20%] 11/04	PA 1[25%] 18/04	PA 1[25%] 26/04	PA 1[25%] 02/05	PA 1[25%] 09/05	PA 1[25%] 16/05	PA 1[25%] 23/05	PA 1[25%] 30/05
58	Cairo/Pilips desert Road	38.2 days	PA 1[25%] 04/04	PA 1[20%] 11/04	PA 1[25%] 18/04	PA 1[25%] 26/04	PA 1[25%] 02/05	PA 1[25%] 09/05	PA 1[25%] 16/05	PA 1[25%] 23/05	PA 1[25%] 30/05
68	El-Katamya Check Point	38.2 days	PA 1[25%] 04/04	PA 1[20%] 11/04	PA 1[25%] 18/04	PA 1[20%] 26/04	PA 1[25%] 02/05	PA 1[25%] 09/05	PA 1[25%] 16/05	PA 1[25%] 23/05	PA 1[25%] 30/05
69											
11	Cairo/El-Fayom Desert Road	38.25 days	PA 1[25%] 05/04	PA 1[25%] 13/04	PA 1[25%] 19/04	PA 1[25%] 26/04	PA 1[25%] 03/05	PA 1[25%] 10/05	PA 1[25%] 17/05	PA 1[25%] 24/05	PA 1[25%] 31/05
20	Cairo/Alex. Desert Road	38.25 days	PA 1[25%] 05/04	PA 1[25%] 13/04	PA 1[25%] 19/04	PA 1[25%] 26/04	PA 1[25%] 03/05	PA 1[25%] 10/05	PA 1[25%] 17/05	PA 1[25%] 24/05	PA 1[25%] 31/05
90	El-Tibben Traffic Dept.	38.25 days	PA 1[25%] 05/04	PA 1[25%] 13/04	PA 1[25%] 19/04	PA 1[25%] 26/04	PA 1[25%] 03/05	PA 1[25%] 10/05	PA 1[25%] 17/05	PA 1[25%] 24/05	PA 1[25%] 31/05
138	El-Hawamdyia Traffic Dept.	38.25 days	PA 1[25%] 05/04	PA 1[25%] 13/04	PA 1[25%] 19/04	PA 1[25%] 26/04	PA 1[25%] 03/05	PA 1[25%] 10/05	PA 1[25%] 17/05	PA 1[25%] 24/05	PA 1[25%] 31/05

CAIP/VET

ORT Follow-up Schedule

Draft

ID	Task Name	Duration	03 Apr	10 Apr	17 Apr	24 Apr	01 May	08 May	15 May	22 May	29 May
79	El-Drasa Traffic dept.	38.25 days	PA 1[25%] /04	PA 1[25%] 08/04	PA 1[20%] 15/04	PA 1[25%] 22/04	PA 1[25%] 29/04	PA 1[25%] 06/05	PA 1[25%] 13/05	PA 1[25%] 20/05	PA 1[25%] 27/05
80	El-Drasa Traffic dept. 1	0.25 days	A 1[25%] /04								
81	El-Drasa Traffic dept. 2	0.25 days	PA 1[25%] 08/04								
82	El-Drasa Traffic dept. 3	0.2 days		PA 1[20%] 15/04							
83	El-Drasa Traffic dept. 4	0.25 days			PA 1[25%] 22/04						
84	El-Drasa Traffic dept. 5	0.25 days				PA 1[25%] 29/04					
85	El-Drasa Traffic dept. 6	0.25 days					PA 1[25%] 06/05				
86	El-Drasa Traffic dept. 7	0.25 days						PA 1[25%] 13/05			
87	El-Drasa Traffic dept. 8	0.25 days							PA 1[25%] 20/05		
88	El-Drasa Traffic dept. 9	0.25 days								PA 1[25%] 27/05	
107	El-Salam City Traffic Dept.	38.25 days	A 1[25%] /04	PA 1[25%] 08/04	PA 1[20%] 15/04	PA 1[25%] 22/04	PA 1[25%] 29/04	PA 1[25%] 06/05	PA 1[25%] 13/05	PA 1[25%] 20/05	PA 1[25%] 27/05
108	El-Salam city Traffic dept. 1	0.25 days	A 1[25%] /04								
109	El-Salam city Traffic dept. 2	0.25 days	PA 1[25%] 08/04								
110	El-Salam city Traffic dept. 3	0.2 days		PA 1[20%] 15/04							

CAIP/VET

ORT Follow-up Schedule

Draft

ID	Task Name	Duration	03 Apr	10 Apr	17 Apr	24 Apr	01 May	08 May	15 May	22 May	29 May
111	El-Salam city Traffic dept. 4	0.25 days	TWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS
112	El-Salam city Traffic dept. 5	0.25 days									
113	El-Salam city Traffic dept. 6	0.25 days									
114	El-Salam city Traffic dept. 7	0.25 days									
115	El-Salam City Traffic Dept. 8	0.25 days									
116	El-Salam City Traffic Dept. 9	0.25 days									
117	Nasr City Traffic Dept.	38.25 days	A 1[25%] /04	PA 1[25%] 08/04	PA 1[20%] 15/04	PA 1[25%] 22/04	PA 1[25%] 29/04	PA 1[25%] 06/05	PA 1[25%] 13/05	PA 1[25%] 20/05	PA 1[25%] 27/05
118	Nasr City Traffic Dept. 1	0.25 days	A 1[25%] /04								
119	Nasr City Traffic Dept. 2	0.25 days		PA 1[25%] 08/04							
120	Nasr City Traffic Dept. 3	0.2 days			PA 1[20%] 15/04						
121	Nasr City Traffic Dept. 4	0.25 days				PA 1[25%] 22/04					
122	Nasr City Traffic Dept. 5	0.25 days					PA 1[25%] 29/04				
123	Nasr City Traffic Dept. 6	0.25 days						PA 1[25%] 06/05			
124	Nasr City Traffic Dept. 7	0.25 days							PA 1[25%] 13/05		

CAIP/VET

ORT Follow-up Schedule

Draft

ID	Task Name	Duration	03 Apr	10 Apr	17 Apr	24 Apr	01 May	08 May	15 May	22 May	29 May
125	Nasr City Traffic Dept. 8	0.25 days	TWTFSSMTWTWTFSSMTWTWTFSSMTWTWTFSSMTWTWTFSSMT	TWTFSSMTWTWTFSSMTWTWTFSSMTWTWTFSSMTWTWTFSSMT	TWTFSSMTWTWTFSSMTWTWTFSSMTWTWTFSSMTWTWTFSSMT	TWTFSSMTWTWTFSSMTWTWTFSSMTWTWTFSSMTWTWTFSSMT	TWTFSSMTWTWTFSSMTWTWTFSSMTWTWTFSSMTWTWTFSSMT	TWTFSSMTWTWTFSSMTWTWTFSSMTWTWTFSSMTWTWTFSSMT	TWTFSSMTWTWTFSSMTWTWTFSSMTWTWTFSSMTWTWTFSSMT	TWTFSSMTWTWTFSSMTWTWTFSSMTWTWTFSSMTWTWTFSSMT	
126	Nasr City Traffic Dept. 9	0.25 days									
1	Ring Road	38.2 days	PA 1[25%] 04/04	PA 1[25%] 11/04	PA 1[25%] 18/04	PA 1[20%] 26/04	PA 1[20%] 02/05	PA 1[20%] 09/05	PA 1[20%] 16/05	PA 1[20%] 23/05	PA 1[20%] 30/05
2	Ring Road 1	0.2 days	PA 1[25%] 04/04								
3	Ring Road 2	0.2 days		PA 1[25%] 11/04							
4	Ring Road 3	0.2 days			PA 1[25%] 18/04						
5	Ring Road 4	0.2 days				PA 1[20%] 26/04					
6	Ring Road 5	0.2 days					PA 1[20%] 02/05				
7	Ring Road 6	0.2 days						PA 1[20%] 09/05			
8	Ring Road 7	0.2 days							16/05		
9	Ring Road 8	0.2 days								23/05	
10	Ring Road 9	0.2 days									
29	Cairo/ Ismailiya Desert Road	38.2 days	PA 1[25%] 04/04	PA 1[20%] 11/04	PA 1[25%] 18/04	PA 1[20%] 26/04	PA 1[20%] 02/05	PA 1[20%] 09/05	PA 1[20%] 16/05	PA 1[20%] 23/05	PA 1[20%] 30/05
30	Cairo Ismailiya Desert Road 1	0.2 days	PA 1[25%] 04/04								

CAIP/VET

ORT Follow-up Schedule

Draft

ID	Task Name	Duration	03 Apr	10 Apr	17 Apr	24 Apr	01 May	08 May	15 May	22 May	29 May
			TWTFSS	TWTFSS	TWTFSS	TWTFSS	TWTFSS	TWTFSS	TWTFSS	TWTFSS	TWTFSS
31	Cairo Ismailiya Desert Road 2	0.2 days		PA 1[20%] 11/04							
32	Cairo Ismailiya Desert Road 3	0.2 days			PA 1[25%] 18/04						
33	Cairo Ismailiya Desert Road 4	0.2 days				PA 1[20%] 26/04					
34	Cairo Ismailiya Desert Road 5	0.2 days					PA 1[20%] 02/05				
35	Cairo Ismailiya Desert Road 6	0.2 days						PA 1[20%] 09/05			
36	Cairo/ Ismailiya Desert Road 7	0.2 days							PA 1[20%] 16/05		
37	Cairo/ Ismailiya Desert Road 8	0.2 days								PA 1[20%] 23/05	
38	Cairo/ Ismailiya Desert Road 9	0.2 days									PA 1[20%] 30/05
39	Cairo/Suis desert Road	38.2 days	PA 1[25%] 04/04	PA 1[20%] 11/04	PA 1[25%] 18/04	PA 1[25%] 26/04	PA 1[25%] 02/05	PA 1[25%] 09/05	PA 1[25%] 16/05	PA 1[25%] 23/05	PA 1[25%] 30/05
40	Cairo/Suis desert Road 1	0.2 days	PA 1[25%] 04/04								
41	Cairo/Suis desert Road 2	0.2 days		PA 1[20%] 11/04							
42	Cairo/Suis desert Road 3	0.2 days			PA 1[25%] 18/04						
43	Cairo/Suis desert Road 4	0.2 days				PA 1[25%] 26/04					
44	Cairo/Suis desert Road 5	0.2 days					PA 1[25%] 02/05				

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Draft

ID	Task Name	Duration	03 Apr	10 Apr	17 Apr	24 Apr	01 May	08 May	15 May	22 May	29 May
45	Cairo/Suis desert Road 6	0.2 days	TWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS
46	Cairo/Suis desert Road 7	0.2 days						PA 1[25%] 09/05	16/05		
47	Cairo/Suis desert Road 8	0.2 days							23/05		
48	Cairo/Suis desert Road 9	0.2 days									30/05
58	Cairo/Pilpis desert Road	38.2 days	PA 1[25%] 04/04	PA 1[20%] 11/04	PA 1[25%] 18/04	PA 1[25%] 26/04	PA 1[25%] 02/05	PA 1[25%] 09/05	16/05	23/05	30/05
59	Cairo/Pilpis desert Road 1	0.2 days	PA 1[25%] 04/04								
60	Cairo/Pilpis desert Road 2	0.2 days		PA 1[20%] 11/04							
61	Cairo/Pilpis desert Road 3	0.2 days			PA 1[25%] 18/04						
62	Cairo/Pilpis desert Road 4	0.2 days				PA 1[25%] 26/04					
63	Cairo/Pilpis desert Road 5	0.2 days					PA 1[25%] 02/05				
64	Cairo/Pilpis desert Road 6	0.2 days						PA 1[25%] 09/05	16/05		
65	Cairo/Pilpis desert Road 7	0.2 days									
66	Cairo/Pilpis desert Road 8	0.2 days								23/05	
67	Cairo/Pilpis desert Road 9	0.2 days									30/05

CAIP/VET

ORT Follow-up Schedule

Draft

ID	Task Name	Duration	03 Apr	10 Apr	17 Apr	24 Apr	01 May	08 May	15 May	22 May	29 May
68	El-Katamya Check Point	38.2 days	PA 1[25%] 04/04	PA 1[20%] 11/04	PA 1[25%] 18/04	PA 1[20%] 26/04	PA 1[25%] 02/05	PA 1[25%] 09/05	16/05	23/05	30/05
69											
70	El-Katamya Check Point 1	0.2 days	PA 1[25%] 04/04								
71	El-Katamya Check Point 2	0.25 days		PA 1[20%] 11/04							
72	El-Katamya Check Point 3	0.2 days			PA 1[25%] 18/04						
73	El-Katamya Check Point 4	0.2 days				PA 1[20%] 26/04					
74	El-Katamya Check Point 5	0.2 days					PA 1[25%] 02/05				
75	El-Katamya Check Point 6	0.2 days						PA 1[25%] 09/05			
76	El-Katamya Check Point 7	0.2 days							16/05		
77	El-Katamya Check Point 8	0.2 days								23/05	
78	El-Katamya Check Point 9	0.2 days									30/05
11	Cairo/El-Fayom Desert Road	38.25 days	PA 1[25%] 05/04	PA 1[25%] 13/04	PA 1[25%] 19/04	PA 1[25%] 26/04	PA 1[25%] 03/05	PA 1[25%] 10/05	PA 1[25%] 17/05	24/05	31/05
12	Cairo/El-Fayom Desert Road 1	0.25 days	PA 1[25%] 05/04								
13	Cairo/El-Fayom Desert Road 2	0.25 days		PA 1[25%] 13/04							

CAIP/VET

ORT Follow-up Schedule

Draft

ID	Task Name	Duration	03 Apr	10 Apr	17 Apr	24 Apr	01 May	08 May	15 May	22 May	29 May
14	Cairo/El-Fayom Desert Road 3	0.25 days	TWTFSS	SSMTWTW	SSMTWTW	SSMTWTW	SSMTWTW	SSMTWTW	SSMTWTW	SSMTWTW	SSMTWTW
15	Cairo/El-Fayom Desert Road 5	0.25 days			PA 1[25%] 19/04		PA 1[25%] 03/05				
16	Cairo/El-Fayom Desert Road 6	0.25 days						PA 1[25%] 10/05			
17	Cairo/El-Fayom Desert Road 7	0.25 days							PA 1[25%] 17/05		
18	Cairo/El-Fayom Desert Road 8	0.25 days								24/05	
19	Cairo/El-Fayom Desert Road 9	0.25 days									31/05
20	Cairo/Alex. Desert Road	38.25 days	PA 1[25%] 05/04	PA 1[25%] 13/04	PA 1[25%] 19/04	PA 1[25%] 19/04	PA 1[25%] 03/05	PA 1[25%] 10/05	PA 1[25%] 17/05	PA 1[25%] 24/05	PA 1[25%] 31/05
21	Cairo/Alex. Desert Road 1	0.25 days	PA 1[25%] 05/04								
22	Cairo/Alex. Desert Road 2	0.25 days		PA 1[25%] 13/04							
23	Cairo/Alex. Desert Road 3	0.25 days			PA 1[25%] 19/04						
24	Cairo/Alex. Desert Road 5	0.25 days					PA 1[25%] 03/05				
25	Cairo/Alex. Desert Road 6	0.25 days						PA 1[25%] 10/05			
26	Cairo/Alex. Desert Road 7	0.25 days							PA 1[25%] 17/05		
27	Cairo/Alex. Desert Road 8	0.25 days								24/05	

CAIP/VET

ORT Follow-up Schedule

Draft

ID	Task Name	Duration	03 Apr	10 Apr	17 Apr	24 Apr	01 May	08 May	15 May	22 May	29 May
28	Cairo/Alex. Desert Road 9	0.25 days	TWTFSS	TWTFSS	TWTFSS	TWTFSS	TWTFSS	TWTFSS	TWTFSS	TWTFSS	TWTFSS
89	El-Tibben Traffic Dept.	38.25 days	PA 1[25%] 05/04	PA 1[25%] 13/04	PA 1[25%] 19/04		PA 1[25%] 03/05	PA 1[25%] 10/05	PA 1[25%] 17/05	24/05	31/05
90	El-Tibben Traffic Dept. 1	0.25 days	PA 1[25%] 05/04								
91	El-Tibben Traffic Dept. 2	0.25 days		PA 1[25%] 13/04							
92	El-Tibben Traffic Dept. 3	0.25 days			PA 1[25%] 19/04						
93	El-Tibben Traffic Dept. 5	0.25 days					PA 1[25%] 03/05				
94	El-Tibben Traffic Dept. 6	0.25 days					PA 1[25%] 10/05				
95	El-Tibben Traffic Dept. 7	0.25 days						PA 1[25%] 17/05			
96	El-Tibben Traffic Dept. 8	0.25 days								24/05	
97	El-Tibben Traffic Dept. 9	0.25 days									31/05
136	El-Hawamdya Traffic Dept.	38.25 days	PA 1[25%] 05/04	PA 1[25%] 13/04	PA 1[25%] 19/04		PA 1[25%] 03/05	PA 1[25%] 10/05	PA 1[25%] 17/05	24/05	31/05
137	El-Hawamdya Traffic Dept. 1	0.25 days	PA 1[25%] 05/04								
138	El-Hawamdya Traffic Dept. 2	0.25 days		PA 1[25%] 13/04							
139	El-Hawamdya Traffic Dept. 3	0.25 days			PA 1[25%] 19/04						

ORT Follow-up Schedule

Draft

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CAIP/VET

ORT Follow-up Schedule

Draft

ID	Task Name	Duration	03 Apr	10 Apr	17 Apr	24 Apr	01 May	08 May	15 May	22 May	29 May
			T W T F S S M T W T F S S M T W T F S S M T W T F S S M T	T W T F S S M T W T F S S M T W T F S S M T W T F S S M T	T W T F S S M T W T F S S M T W T F S S M T W T F S S M T	T W T F S S M T W T F S S M T W T F S S M T W T F S S M T	T W T F S S M T W T F S S M T W T F S S M T W T F S S M T	T W T F S S M T W T F S S M T W T F S S M T W T F S S M T	T W T F S S M T W T F S S M T W T F S S M T W T F S S M T	T W T F S S M T W T F S S M T W T F S S M T W T F S S M T	
168	Banha Traffic Dept. 6	0.2 days						PA 1[25%] 11/05	PA 1[25%] 18/05		
169	Banha Traffic Dept. 7	0.2 days									
170	Banha Traffic Dept. 8	0.2 days								25/05	
171	Banha Traffic Dept. 9	0.2 days									01/06
172	Kalyob Traffic Dept.	38.2 days	PA 1[25%] 06/04	PA 1[25%] 20/04	PA 1[25%] 27/04	PA 1[25%] 04/05	PA 1[25%] 11/05	PA 1[25%] 18/05	PA 1[25%] 25/05		01/06
173	Kalyob Traffic Dept. 1	0.2 days	PA 1[25%] 06/04								
174	Kalyob Traffic Dept. 3	0.2 days		PA 1[25%] 20/04							
175	Kalyob Traffic Dept. 4	0.2 days			PA 1[25%] 27/04						
176	Kalyob Traffic Dept. 5	0.2 days				PA 1[25%] 04/05		PA 1[25%] 11/05	PA 1[25%] 18/05		
177	Kalyob Traffic Dept. 6	0.2 days									
178	Kalyob Traffic Dept. 7	0.2 days									
179	Kalyob Traffic Dept. 8	0.2 days								25/05	
180	Kalyob Traffic Dept. 9	0.2 days									01/06
181	Shoubra El-Khema Traffic Dept.	38.2 days	PA 1[25%] 06/04	PA 1[25%] 20/04	PA 1[25%] 27/04	PA 1[25%] 04/05	PA 1[25%] 11/05	PA 1[25%] 18/05	PA 1[25%] 25/05		01/06

CAIP/VET

ORT Follow-up Schedule

Draft

ID	Task Name	Duration	03 Apr	10 Apr	17 Apr	24 Apr	01 May	08 May	15 May	22 May	29 May
			TWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS
182	shoubra El-Khema Traffic Dept. 1	0.2 days	PA 1[25%] 06/04								
183	shoubra El-Khema Traffic Dept. 3	0.2 days		PA 1[25%] 20/04							
184	shoubra El-Khema Traffic Dept. 4	0.2 days			PA 1[25%] 27/04						
185	shoubra El-Khema Traffic Dept. 5	0.2 days				PA 1[25%] 04/05					
186	shoubra El-Khema Traffic Dept. 6	0.2 days					PA 1[25%] 11/05		PA 1[25%] 18/05		
187	shoubra El-Khema Traffic Dept. 7	0.2 days								25/05	
188	Shoubra El-Khema Traffic Dept. 8	0.2 days									01/06
189	Shoubra El-Khema Traffic Dept. 9	0.2 days									
127	El-Sarayay Traffic Dept.	33.25 days	PA 1[25%] 07/04	PA 1[25%] 14/04	PA 1[25%] 21/04	PA 1[25%] 28/04	PA 1[25%] 05/05	PA 1[25%] 12/05	PA 1[25%] 19/05	PA 1[25%] 26/05	
128	El-Sarayay Traffic Dept. 1	0.25 days	PA 1[25%] 07/04								
129	El-Sarayay Traffic Dept. 2	0.25 days		PA 1[25%] 14/04							
130	El-Sarayay Traffic Dept. 3	0.25 days			PA 1[25%] 21/04						
131	El-Sarayay Traffic Dept. 4	0.25 days				PA 1[25%] 28/04					
132	El-Sarayay Traffic Dept. 5	0.25 days					PA 1[25%] 05/05				

CAIP/VET

ORT Follow-up Schedule

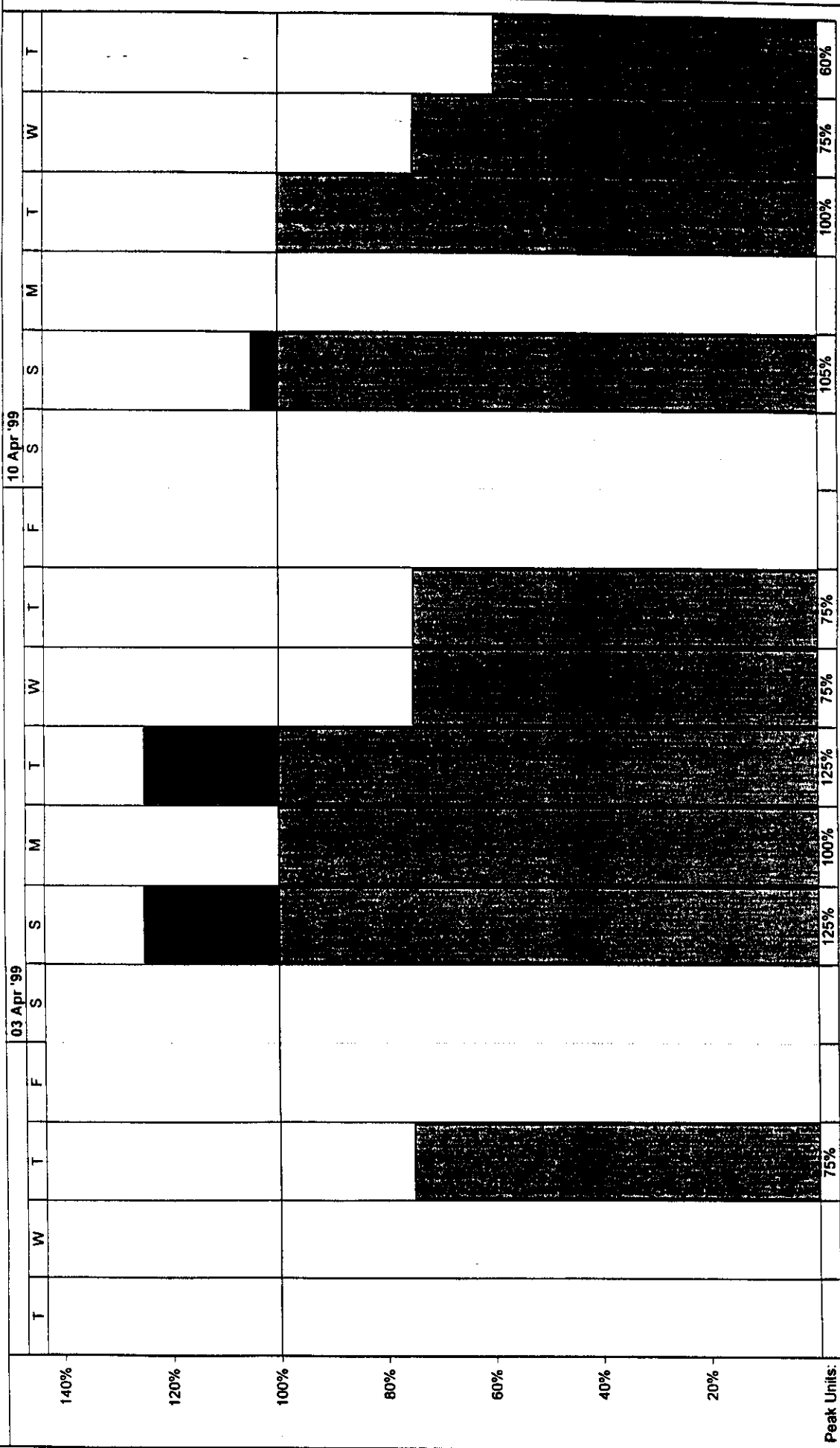
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ID	Task Name	Duration	03 Apr	10 Apr	17 Apr	24 Apr	01 May	08 May	15 May	22 May	29 May
133	El-Sarayay Traffic Dept. 6	0.25 days	TWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS
134	El-Sarayay Traffic Dept. 7	0.25 days							PA 1[25%] 19/05		
135	El-Sarayay Traffic Dept. 8	0.25 days								26/05	
145	El-Agoza Traffic Dept.	33.25 days							PA 1[25%] 19/05		
146	El-Agoza Traffic Dept. 1	0.25 days	PA 1[25%] 07/04	PA 1[25%] 14/04	PA 1[25%] 21/04	PA 1[25%] 28/04	PA 1[25%] 05/05	PA 1[25%] 12/05	PA 1[25%] 19/05	26/05	
147	El-Agoza Traffic Dept. 2	0.25 days	PA 1[25%] 07/04	PA 1[25%] 14/04							
148	El-Agoza Traffic Dept. 3	0.25 days			PA 1[25%] 21/04						
149	El-Agoza Traffic Dept. 4	0.25 days				PA 1[25%] 28/04					
150	El-Agoza Traffic Dept. 5	0.25 days					PA 1[25%] 05/05				
151	El-Agoza Traffic Dept. 6	0.25 days						PA 1[25%] 12/05	PA 1[25%] 19/05		
152	El-Agoza Traffic Dept. 7	0.25 days									
153	El-Agoza Traffic Dept. 8	0.25 days								26/05	
154	Nekla Traffic Dept.	33.25 days	PA 1[25%] 07/04	PA 1[25%] 14/04	PA 1[25%] 21/04	PA 1[25%] 28/04	PA 1[25%] 05/05	PA 1[25%] 12/05	PA 1[25%] 19/05	26/05	
155	Nekla Traffic Dept. 1	0.25 days	PA 1[25%] 07/04								

CAIP/VET

ORT Team Schedule

Draft



PA 1

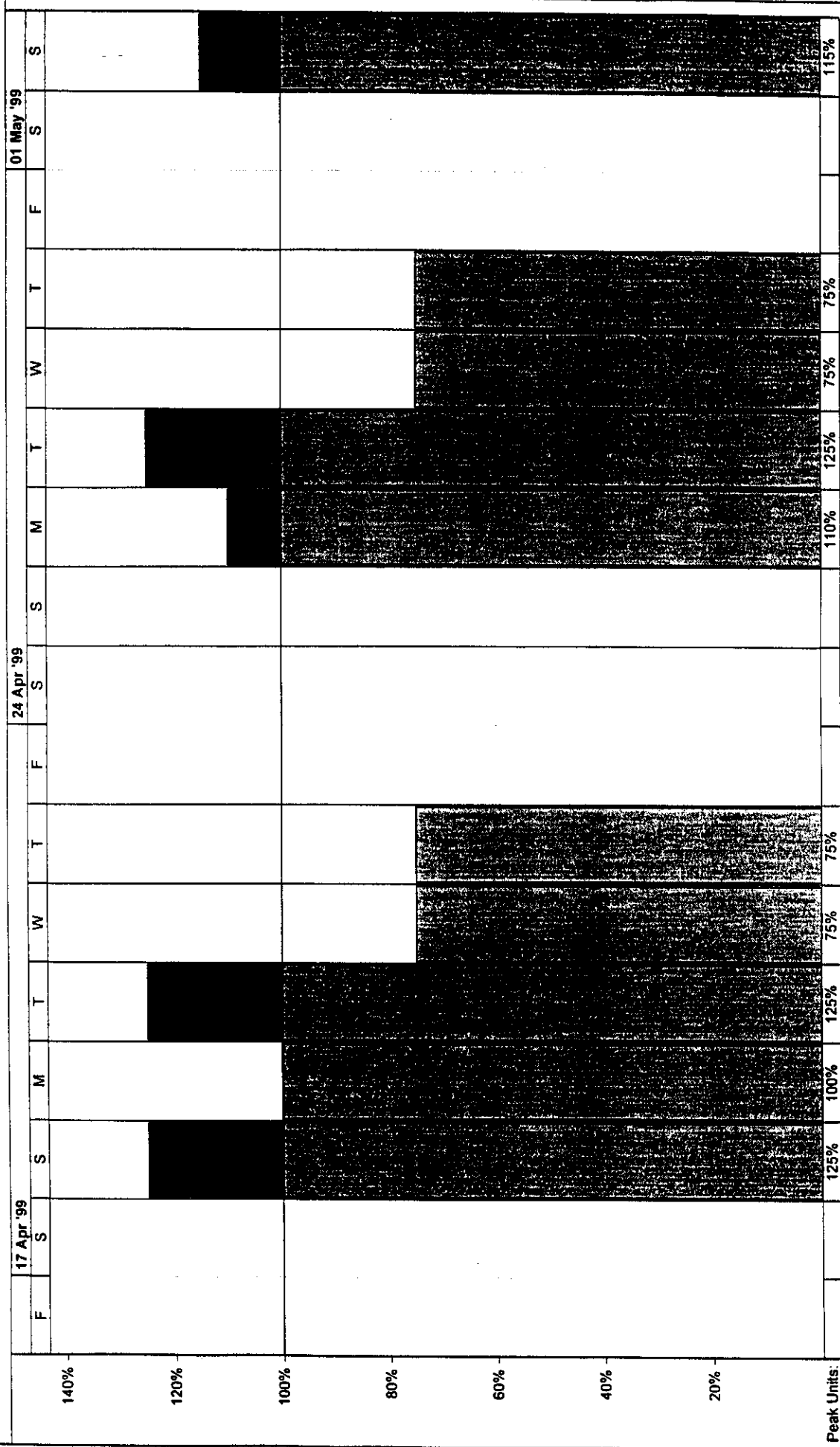
Overallocated:

Allocated:

CAIP/VET

ORT Team Schedule

Draft



Peak Units:

PA 1

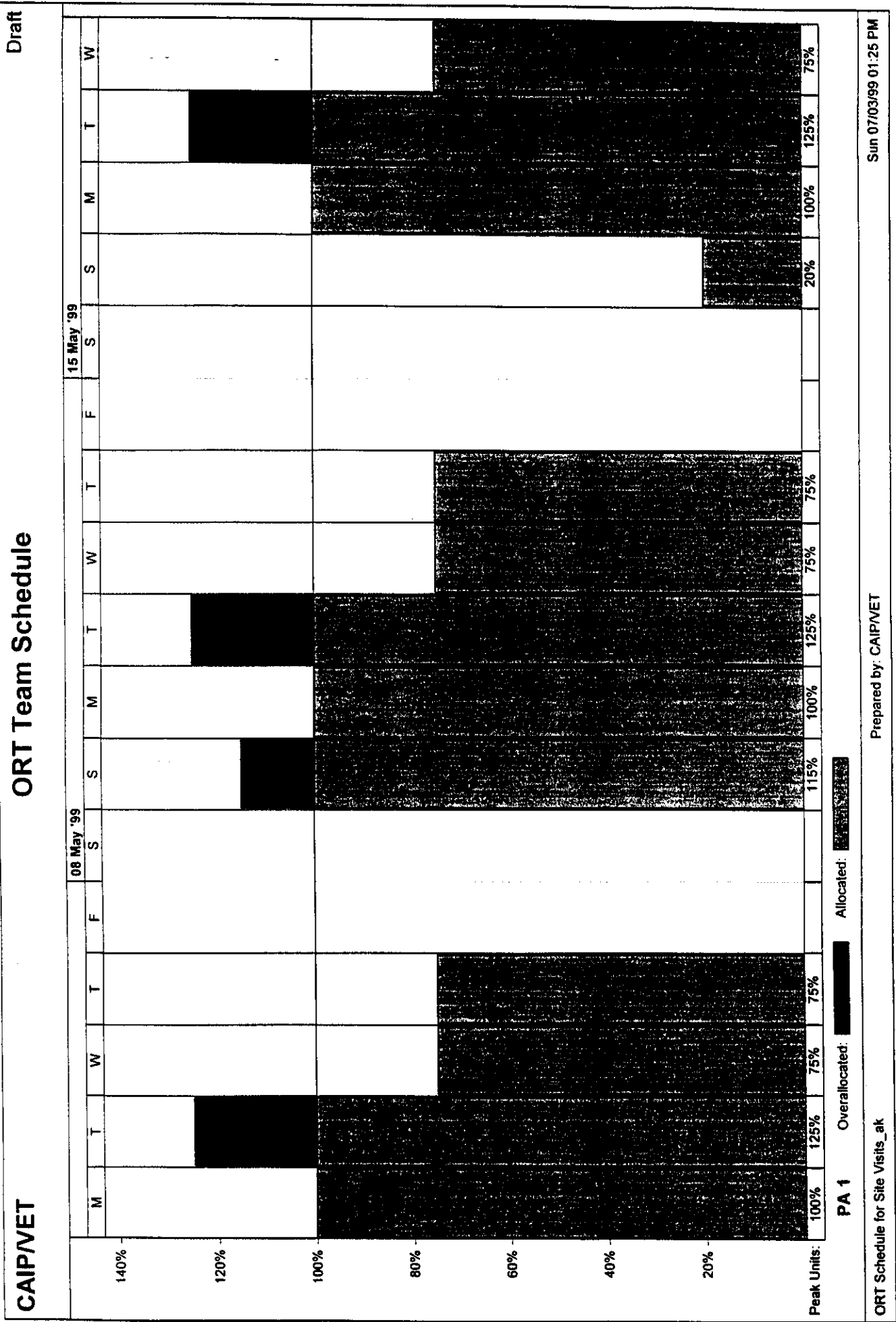
Overalllocated:

Allocated:

ORT Schedule for Site Visits_ak

Prepared by: CAIP/VET

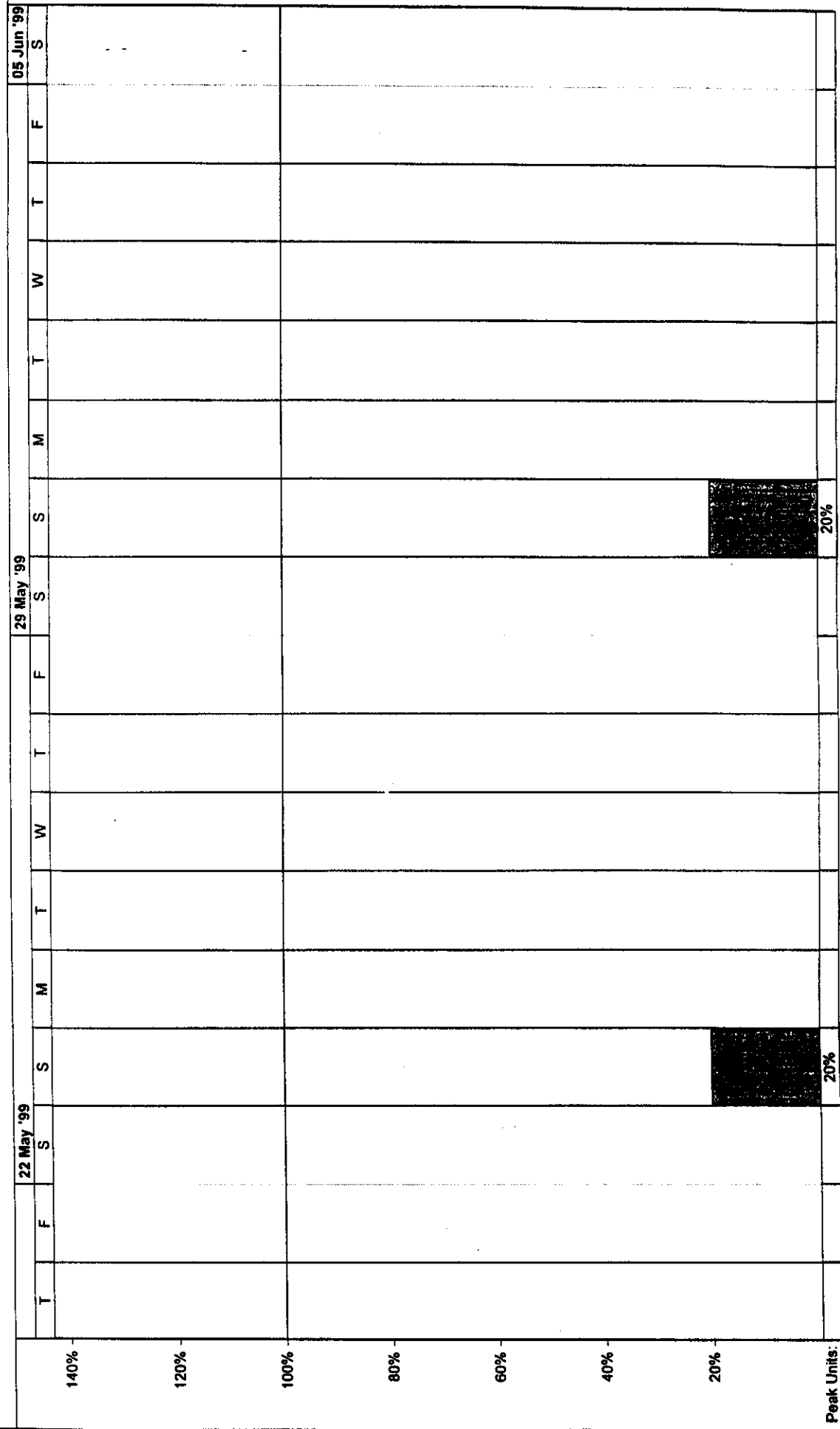
Sun 07/03/99 01:25 PM



CAIP/VET

ORT Team Schedule

Draft



PA 1

Overallocated:

Allocated:

ORT Schedule for Site Visits_ak

Prepared by: CAIP/VET

Sun 07/03/99 01:25 PM

Attachment 3

**ORT Support Requirements
& Data Processing**



Misr Helwan Road. Bldg. 30
Maadi. Cairo. Egypt
Tel.. 350-7573 / 351-6134 / 375-1469
375-0954 / 375-1245
Fax 351-5137
E-Mail: caip@intouch.com

CAIRO AIR IMPROVEMENT PROJECT
Managed by Chemonics Consortium

مشروع تحسين هواء القاهرة
إدارة مجموعة كيمونكس

February 18, 1999

Dr. Mohamed El Zarka
Head of Environmental Quality Sector
Egyptian Environmental Affairs Agency
30 Misr Helwan Road - Maadi

Dear Dr. El Zarka:

We are pleased that the EEAA ORT support group has been established and that you now have the manpower to manage this effort. This is a great start to building the institutional capacity within EEAA required to manage VET programs and presents an excellent opportunity to begin data entry and manipulation of the database to produce routine reports on the ORT program.

As you know, CAIP is developing a test results database for the ORT data and would like to assist your staff in initiating this effort as part of their duties. Data entry is designed to select and record either the Tune-Up Phase I results or ORT data since you may desire to combine both sets of results. This will allow the EEAA ORT unit to also assume the entry of the service station data on the same machine, as we agreed some time ago.

Our staff has developed the specifications for the required data processing resources in Attachment 1.

Please review the reports in Attachment 2, which are examples, with fabricated data, of six reports we are developing and which should provide a base for your continuing assessment of the ORT mission. These six basic reports may be run for the entire data set for the period desired to show findings, or by specific sites to allow EEAA to better manage the work force and determine unit productivity, etc. If you have any suggestions regarding these outputs, please let us know as soon as possible.

In order to handle the initial data generated since the ORT launch, and to allow sufficient time for EEAA to acquire the data processing resources, CAIP is prepared to begin ORT data processing on an interim basis. We will finalize the data entry and reporting software, establish the database temporarily on one of our machines, and perform the data entry and analysis until March 31, 1999. By that time EEAA should acquire the needed equipment and be certain that an appropriate member of your current ORT staff has spent adequate time with the VET staff to understand and assume the test result processing tasks.



CAIRO AIR IMPROVEMENT PROJECT

Dr. Mohamed El Zarka

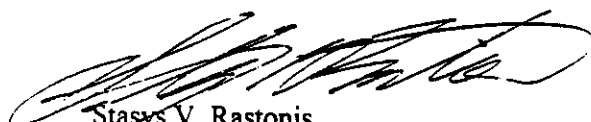
February 18, 1999

Page 2

You may wish to designate one of your ORT headquarters' staff as the lead individual to work directly with the VET team to finalize this critical step in the ORT program.

We are pleased that the ORT program is off to a good start, and even more pleased that this provides a genuine opportunity to demonstrate a sustainable transfer of activities from the project to EEAA. Please call John Pachuta or me if you have any questions on this matter.
Thank you for your assistance.

Regards,



Stasys V. Rastonis

Attachments

cc: Elzadia Washington. USAID

ATTACHMENT 1

Hardware:

- Pentium PC (233 MHz minimum) with 64MB memory, 4.3GB hard disk, 1.44MB floppy
- Ethernet network interface card (NIC) – 100MHz
- 14" VGA color monitor
- English/Arabic Keyboard

Operating System: Win95 (Arabic Edition)

Software requirements: MS Office (Professional Edition; MS Access Included)

ATTACHMENT 2

Sample ORT Reports

REPORT 02

Pass/Fail by Components - Network-Wide Summary, All Vehicles

[illegible]

MONTHLY ON ROAD TESTING SUMMARY REPORT BY MODEL YEAR
From 01-01-1999 thru 31-01-1999
Failures for Exhaust Gases Only - Network-Wide Summary

year	exhaust gas tests	% pass	%fail	% fail HC only	% fail CO only	% fail HC+CO
<1970	12	58.3	41.7	24.2	15.7	1.8
1970	23	69.6	30.4	17.2	11.3	1.9
1971	32	65.6	34.4	20.1	10.1	4.2
1972	35	77.1	22.9	14.2	6.1	2.6
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1998	110	83.6	16.4	10.1	4.7	1.6
1999	93	93.5	6.5	3.8	1.3	1.4
Total	1001	81.2	18.8	11.2	7.0	0.6

MONTHLY ON ROAD TESTING SUMMARY REPORT BY MODEL YEAR
 From 01-01-1999 thru 31-01-1999
 Pass/Fail by Year by Type

REPORT 04

year	Vehicle Type	number tested	pass	fail	% pass	% fail	% fail exhaust gases	% fail opacity
<1970	passngr	4	3	1	75.0	25.0	25.0	0.0
	taxi	3	2	1	66.7	33.3	33.3	0.0
	lt truck	1	1	0	100.0	0.0	0.0	0.0
	med truck	2	1	1	50.0	50.0	0.0	50.0
	hd truck	0	0	0	-	-	-	-
	bus/van	0	0	0	-	-	-	-
1971	m/c	2	0	2	0.0	100.0	0.0	100.0
	passngr	5	4	1	80.0	20.0	20.0	0.0
	taxi	12	8	4	66.7	33.3	16.7	16.7
	lt truck	2	2	0	100.0	0.0	0.0	0.0

Total		1456	1209	247	83.0	17.0	12.0	5.0

Note: Vehicle classes to be adjusted to match field data.

MONTHLY ON ROAD TESTING SUMMARY REPORT BY MODEL YEAR
 From 01-01-1999 thru 31-01-1999
 Pass/Fail by Standard by Type

REPORT 05

year	Vehicle Type	number tested	pass	fail	% pass	% fail	% fail exhaust gases	% fail opacity
<1994	passngr	40	30	10	75.0	25.0	20.0	5.0
	taxi	35	28	7	80.0	20.0	13.0	7.0
	lt truck	10	7	3	70.0	30.0	20.0	10.0
	med truck	25	21	4	84.0	16.0	12.0	4.0
	hd truck	5	3	2	60.0	40.0	20.0	20.0
	bus/van	10	4	6	40.0	60.0	0.0	60.0
	m/c	20	11	9	55.0	45.0	0.0	45.0
	Subtotal	145	104	41	71.7	28.3	19.8	8.5
1995+	passngr	50	40	10	80.0	20.0	20.0	0.0
	taxi	120	80	40	66.7	33.3	16.7	16.7
	lt truck	20	20	0	100.0	0.0	0.0	0.0
	med truck	.....	.....	.....	.....	.....	.....	.....
	hd truck	.....	.....	.....	.....	.....	.....	.....
	bus/van	.....	.....	.....	.....	.....	.....	.....
	m/c	.....	.....	.....	.....	.....	.....	.....
	Subtotal	.....	.....	.....	.....	.....	.....	.....
Total		1456	1209	247	83.0	17.0	12.0	5.0

Note: Vehicle classes to be adjusted to match field data.

MONTHLY ON ROAD TESTING SUMMARY REPORT BY MODEL YEAR
 From 01-01-1999 thru 31-01-1999
 Failures for Exhaust Gases Only - By Vehicle Type

REPORT 06

year	Vehicle Type	exhaust gas tests	% pass	%fail	% fail HC only	% fail CO only	% fail HC+CO
<1994	passngr	12	58.3	41.7	24.2	15.7	1.8
	taxi	23	69.6	30.4	17.2	11.3	1.9
	lt truck	32	65.6	34.4	20.1	10.1	4.2
	med truck	35	77.1	22.9	14.2	6.1	2.6
	hd truck	....	....	....	....	....	....
	bus/van	....	....	....	....	....	....
1995+	m/c	....	....	....	....	....	....
	Sub-Total	....	....	....	....	....	....
	passngr	....	....	....	....	....	....
	taxi	....	....	....	....	....	....
	lt truck	....	....	....	....	....	....
	med truck	....	....	....	....	....	....
Total	hd truck	....	....	....	....	....	....
	bus/van	....	....	....	....	....	....
Total	m/c	....	....	....	....	....	....
	Sub-Total	....	....	....	....	....	....
Total		1001	81.2	18.8	11.2	7.0	0.6

Note: Vehicle classes to be adjusted to match field data.

Attachment 4

ORT Support Costs

Summary Report

No.	Item		Cost
1	Total Annual Running Cost of the Analyzers (LE)	=	17920
2	Total Annual Maintenance Cost of the Analyzers (LE)	=	97200
3	Running over head Cost (LE)	=	116320
	Total	=	231440

The Total Annual Cost of the ORT Programm (LE) = **231440**

Assumptions:

- 1- Average Number of Tested Cars/hr = 5
- 2- Average Number of Working hrs/day = 5
Number of field data collection Working
- 3- Days / Month = 20
- 4- Average Number of Working Analyzers / day = 25
- 5- **Average Number of Tested Cars/yr.** = **150000**
- 6- 60 % compliance rate among tested vehicles = 90000

Gasoline Analyzers			
Item	Units / Analyzer / year	Average Cost / Unit (LE)	Annual Cost/Analyzer (LE)
Printing Paper Roll	15	10	150
60 AMP battery	1	220	220
Filter kit	26	15	390
Total			760
Annual cost of the Gasoline Analyzers (LE) =			16720

Diesel Analyzers			
Item	Units / Analyzer / year	Average Cost / Unit (LE)	Annual Cost/Analyzer (LE)
Printing Paper Roll	15	10	150
Annual Cost of the Diesel Analyzers (LE) =			1200

Total Annual Running Cost of the Analyzers (LE) =	17920
---	-------

Maintenance Control Sheet			
The prices are according to the tune-up Phase I			
Item	Times / year / Analyzer	Cost / Time	Total Cost
Service call fees	18	150	2700
Analyzer Calibration	2	300	600
Cost of each hour required in addition to the first hour	6	50	300
Total			3600

Total Annual Maintenance Cost of the Analyzers (LE)	=	97200
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Item	units / year	Cost / Unit (LE)	Total Cost (LE)
Thanks cards	90,000	0.27	24300
ORT Flyers	60000	1	60000
Log. Book	3000	10	30000
Name Tags	20	35	700
Sleeve Cover	60	10	600
Yellow Fabric	60	2	120
Stationary Material	40	15	600
Total			116320
Training Activities (Video - Photograph - Renting Analyzers) Optional	1	1500	1500

Attachment 5

**EEAA / Oil Company Analyzer
Loan Program**

Caltex

Station	Address	Analyzer Description	Date	Service Contract Ends	S/N	Components
Gesr El Sues	Gesr El-Sues St, next to CTA Garage	Technotest 490 Diesel Analyzer	3-Jun-98	30-Nov-98	151313	Electricity Cable
						Remote Control Unit
		Technotest 488 Gas Analyzer	3-Jun-98	30-Nov-98	5102	RPM Sensor Cable
						Electricity Cable
Makram Ebeid	Makram Ebeid St. Nasr City	Opus 40 Gas Analyzer	3-Jun-98	30-Nov-98	691111A002	RPM Sensor
						Oil Temperature Cable
		Lucas Hartidge Diesel Analyzer	15-Jun-98	12-Dec-98	527	Electricity Cable
						RPM Sensor Cable
Sheraton Heliopolis	El-Matar St. Orouba, Heliopolis	Opus 40 Gas Analyzer	3-Jun-98	30-Nov-98	691111A002	Oil Temperature Cable
						Remote Control Unit
		Lucas Hartidge Diesel Analyzer	15-Jun-98	12-Dec-98	527	2 RPM Sensor cables
						RPM Sensor
						220V to 12V Transformer
						Cleaning Brush
						Remote Control Unit

CO-OP

Station	Address	Analyzer Description	Date	Service Contract Ends	S/N	Components
El-Khalafawi	Khalafawi St. Shobra	Technotest 490 Diesel Analyzer	8-Jun-98	5-Dec-98	151313	Electricity Cable Remote Control Unit RPM Sensor Cable Electricity Cable RPM Sensor
		Technotest 488 Gas Analyzer	8-Jun-98	5-Dec-98	5102	Oil Temperature Cable Light Sensor Sample Probe Tailpipe probe RPM Sensor Cable Electricity Cables Remote Control Unit Cleaning Brush RPM Sensor Cable Oil Temperature Cable Tailpipe Probe Electricity Cables RPM Sensor Cable Oil Temperature Cable Tailpipe Probe Electricity Cables Electricity Cable RPM Sensor Cable Oil Temperature Cable Tailpipe Probe Electricity Cables Electricity Cable RPM Sensor Cable Oil Temperature Cable Remote Control Unit Oil Temperature Probe Tailpipe Probe RPM Sensor 2 RPM Sensor cables RPM Sensor 220V to 12V Transformer Cleaning Brush Remote Control Unit Oil Temperature Probe Tailpipe Probe RPM Sensor
El-Saf	54 El-Saf St. Autostrad. Tebbin	Technotest 490 Diesel Analyzer	3-Jun-98	30-Nov-98	G5N-151319	G5N-151319
		Technotest 488 Gas Analyzer				
Maadi	El-Nafoura Sq. , Maadi Entrance #2	Technotest 488 Gas Analyzer	4-Jun-98	1-Dec-98	5109	Electricity Cables RPM Sensor Cable Oil Temperature Cable Tailpipe Probe Electricity Cables Electricity Cable RPM Sensor Cable Oil Temperature Cable Tailpipe Probe Electricity Cables Electricity Cable RPM Sensor Cable Oil Temperature Cable Remote Control Unit Oil Temperature Probe Tailpipe Probe RPM Sensor 2 RPM Sensor cables RPM Sensor 220V to 12V Transformer Cleaning Brush Remote Control Unit Oil Temperature Probe Tailpipe Probe RPM Sensor
Malik Faisal	7 Malik Faisal St. Haram	Opus 40 Gas Analyzer	9-Jun-98	6-Dec-98	69111A004	Electricity Cable RPM Sensor Cable Oil Temperature Cable Tailpipe Probe Electricity Cables Electricity Cable RPM Sensor Cable Oil Temperature Cable Remote Control Unit Oil Temperature Probe Tailpipe Probe RPM Sensor 2 RPM Sensor cables RPM Sensor 220V to 12V Transformer Cleaning Brush Remote Control Unit Oil Temperature Probe Tailpipe Probe RPM Sensor
Manial	El-Manial St	Sun MGA 1200 Gas Analyzer	9-Jun-98	6-Dec-98	15B13673	Electricity Cable RPM Sensor Cable Oil Temperature Cable Tailpipe Probe Electricity Cables Electricity Cable RPM Sensor Cable Oil Temperature Cable Remote Control Unit Oil Temperature Probe Tailpipe Probe RPM Sensor 2 RPM Sensor cables RPM Sensor 220V to 12V Transformer Cleaning Brush Remote Control Unit Oil Temperature Probe Tailpipe Probe RPM Sensor
Mosadak	1 Mosadak St. Dokki	Sun MGA 1200 Gas Analyzer	4-Jun-98	1-Dec-98	15B13672	Electricity Cable RPM Sensor Cable Oil Temperature Cable Tailpipe Probe Electricity Cables Electricity Cable RPM Sensor Cable Oil Temperature Cable Remote Control Unit Oil Temperature Probe Tailpipe Probe RPM Sensor 2 RPM Sensor cables RPM Sensor 220V to 12V Transformer Cleaning Brush Remote Control Unit Oil Temperature Probe Tailpipe Probe RPM Sensor
Mostorod	Mubarak St, Teret El-Imailiyah, Sawah	Lucas Hartidge Diesel Analyzer	15-Jun-98	12-Dec-98	283	Electricity Cable RPM Sensor Cable Oil Temperature Cable Tailpipe Probe Electricity Cables Electricity Cable RPM Sensor Cable Oil Temperature Cable Remote Control Unit Oil Temperature Probe Tailpipe Probe RPM Sensor 2 RPM Sensor cables RPM Sensor 220V to 12V Transformer Cleaning Brush Remote Control Unit Oil Temperature Probe Tailpipe Probe RPM Sensor
Sawah	El-Sawah St.	Sun MGA 1200 Gas Analyzer	9-Jun-98	6-Dec-98	15B13674	Electricity Cable RPM Sensor Cable Oil Temperature Cable Tailpipe Probe Electricity Cables Electricity Cable RPM Sensor Cable Oil Temperature Cable Remote Control Unit Oil Temperature Probe Tailpipe Probe RPM Sensor 2 RPM Sensor cables RPM Sensor 220V to 12V Transformer Cleaning Brush Remote Control Unit Oil Temperature Probe Tailpipe Probe RPM Sensor

ESSO

Station	Address	Analyzer Description	Date	Service Contract Ends	S/N	Components
Ain El- Sira	Salah Salem St, Ain El-Sira.	Opus 40 Gas Analyzer	30-Jun-98	27-Dec-98	69/1/A001	Remote Control Unit Oil Temperature Probe Tailpipe Probe RPM Sensor
		Opus 50 Diesel Analyzer			69111D001	Remote Control Unit Oil Temperature Probe Tailpipe Probe RPM Sensor
Bab El- Louk	Corner of Tahrir and Nobar Streets	Technotest 488 Gas Analyzer	29-Jun-98	26-Dec-98	5107	Oil Temperature Probe Tailpipe Probe RPM Sensor
El- Salam	Belbis Rd. Salam City	Refused to receive analyzer		Waiting for a Gas Analyzer		
El-Ballon	26th of July St.	Lucas Hartridge Diesel Analyzer	29-Jun-98	26-Dec-98	280	RPM Sensor 220V to 12V Transformer Cleaning Brush Remote Control Unit 9 V Battery
Helwan	32 Ragheb St. Helwan	Sun MGA 1200 Gas Analyzer	30-Jun-98	27-Dec-98	15B13632	Oil Temperature Probe Tailpipe Probe RPM Sensor
Mena House	Al-Ahram St. Giza	Sun MGA 1200 Gas Analyzer	29-Jun-98	26-Dec-98	15B13684	Oil Temperature Probe Tailpipe Probe RPM Sensor
Sudan	Suadan St. Mohandesseen	Technotest 488 Gas Analyzer	29-Jun-98	26-Dec-98	5110	Oil Temperature Probe Tailpipe Probe RPM Sensor
		Technotest 490 Diesel Analyzer	29-Jun-98	26-Dec-98		Sample Probe Tailpipe probe RPM Sensor Cable Electricity Cables Remote Control Unit

Misr Petroleum

Station	Address	Analyzer Description	Date	Service Contract Ends	S/N	Components
Borg El- Zamaiek	26th of July St. Zamaiek	Sun MGA 1200 Gas Analyzer	8-Jun-98	5-Dec-98	15B13614	Oil Temperature Probe Tailpipe Probe RPM Sensor Printer
Hay El- Sades	42 Garb Elestad St, Nasr City	Opus 50 Diesel Analyzer	3-Jun-98	30-Nov-98	691/1D003	Remote Control Unit Opacity Measurement Unit Oil Temperature Cable Electricity Cable Electricity Cable
		Opus 40 Gas Analyzer	3-Jun-98	30-Nov-98	691/1A003	Oil Temperature Cable RPM Sensor Cable Remote Control Unit
		Technotest Diesel Analyzer	7-Jul-98	3-Jan-99	5108	Remote Control Unit Electricity Cable RPM Sensor Electricity Cable Tailpipe Cable RPM Sensor Cable Oil Temperature Cable
Ramsis	109 Ramsis St.	Technotest Gas Analyzer			151317	Electricity Cable Tailpipe Cable RPM Sensor Cable Oil Temperature Cable
Roxi	Khalifa El-Maamoun St. Roxi Sq.	Technotest Gas Analyzer	12-Jun-98	9-Dec-98	5115	Electricity Cable Tailpipe Cable RPM Sensor Cable Oil Temperature Cable
Safir	Safir Square, Heliopolis.	Technotest Diesel Analyzer	3-Jun-98	30-Nov-98	151307	Remote Control Unit Electricity Cable RPM Sensor Electricity Cable Tailpipe Cable RPM Sensor Cable Oil Temperature Cable
		Technotest Gas Analyzer	3-Jun-98	30-Nov-98	5114	Electricity Cable Tailpipe Cable RPM Sensor Cable Oil Temperature Cable

Mobil Oil

Station	Address	Analyzer Description	Date	Service Contract Ends	S/N	Components
Katameya	Katameya Ain El-Sokhna Rd.	Lucas Hartidge Diesel Analyzer	3-Feb-99	2-Aug-99	HR172A0525	RPM Sensor 220V to 12V Transformer Cleaning Brush Remote Control Unit
New Maadi	Autostrade, New Maadi, Maadi	MGA Sun 1200 Gas Analyzer	3-Feb-99	2-Aug-99	15B13614	RPM Sensor Oil Temperature Sensor Analyzer Stand Electricity Cables Tailpipe probe

Shell

Station	Address	Analyzer Description	Date	Service Contract Ends	S/N	Components
El- Nasr	El- Nasr Rd, Nasr City	Technotest 488 Gas Analyzer	23-Feb-99	22-Aug-99	5103	RPM Sensor
						Oil Temperature Sensor
						Tailpipe probe
						Electricity Cables
El- Rodah	31 El- Rodah St. Manial	Technotest 488 Gas Analyzer	3-Jun-98	30-Nov-98	5116	RPM Sensor
						Oil Temperature Sensor
						Tailpipe Probe
						Electricity Cables
		Technotest 490 Diesel Analyzer			151308	Sample Pick-up Hose
						RPM Sensor
						Tailpipe probe
						Remote Control Unit
Malik Faisal	7 Malik Faisal St. Haram	Sun MGA 1200 Gas Analyzer	4-Jun-98	1-Dec-98	15B13669	12 V Input Cable
						Analyzer Stand
						Printer
						Tailpipe probe
		Opus 50 Diesel Analyzer			69111A004	RPM Sensor
						Oil Temperature Sensor
						Analyzer Stand
						Electricity Cables
Misr Helwan/Maadi	Misr Helwan Agricultural Rd. Maadi	Lucas Hartidge Deisel Analyzer	3-Jun-98	30-Nov-98	HR172-A0534	Tailpipe probe
						RPM Sensor
						Oil Temperature Sensor
						Remote Control Unit
		Sun MGA 1200 Gas Analyzer			15B13611	Analyzer Stand
						Printer
						RPM Sensor
						Oil Temperature Cable
						RPM Sensor
						Tailpipe Probe
						Electricity cables